Sont know if your got a copy of this or niet.

USEPA SF 1256891



August 14, 2002

Service Request No: K2205123

Dave Mendenhall Longview Fibre Company 300 Fibre Way P.O. Box 639 Longview, WA 98632

Re: Seattle Box

Dear Dave:

Enclosed are the results of the sample(s) submitted to our laboratory on July 30, 2002. For your reference, these analyses have been assigned our service request number K2205123.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

d Wellace

Ed Wallace

Project Chemist

EW/jeb

Page 1 of \_

-

cc: Hank Rakoz, Longview Fibre, Longview, WA

# Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a

substance allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater

than or equal to the MDL.

#### Inorganic Data Qualifiers

- The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- If the compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

#### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

#### Organic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

#### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- The chromatographic fungerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic tingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y
  The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

Client:

Longview Fibre Company

Project:

Seattle Box Plant

Sample Matrix: Water

Service Request No.:

Date Received:

K2205123 7/30/02

#### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

# Sample Receipt

Two water samples were received for analysis at Columbia Analytical Services on 7/30/02. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

# Diesel Range Organics by NWTPH-Dx

#### **Elevated Method Reporting Limits:**

Sample West Parking Lot required dilution due to the presence of levels of Diesel Range Organics above the calibration range. The reporting limits are adjusted to reflect the dilution.

#### Surrogate Exceptions:

The control criteria were exceeded for the following surrogates in sample West Parking Lot due high levels of Diesel and Residual Range Organics which prevented adequate resolution for quantitation: o-Terphenyl and n-Triacontane. No further corrective action was appropriate.

Approved by ENW Date 9/13/52

Analytical Results

Client:

Longview Fibre Company

Project:

Seattle Box/Lv. Fibre

Sample Matrix:

Water

Service Request: K2205123

Date Collected: 07/25/2002

Date Received: 07/30/2002

# Diesel and Residual Range Organics

Sample Name:

North Loading Dock

Lab Code:

K2205123-001

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Analysis Method:

NWTPH-Dx

Level: Low

Analyte Name
Diesel Range Organics (DRO)
Residual Range Organics (RRO)

Result Q 2000 Y 960 L

Factor Extracted 1 08/01/02 1 08/01/02

Date

Dilution

Analyzed 08/02/02 08/02/02

Date

Lot Note KWG0205586 KWG0205586

Extraction

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
o-Terphenyl	72	50-150	08/02/02	Acceptable	
n-Triacontane	72	50-150	08/02/02	Acceptable	

MRL

250

500

Comments:

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Merged

Form 1A - Organic

RR18980

SuperSet Reference:

**Q.O 0**<sub>1</sub>**5**<sub>of</sub> 1

LFC001964

Analytical Results

Client:

Longview Fibre Company Seattle Box/Lv. Fibre

Project: Sample Matrix:

Water

Service Request: K2205123 Date Collected: 07/25/2002

Date Received: 07/30/2002

Diesel and Residual Range Organics

Sample Name:

West Parking Lot

Lab Code:

K2205123-002

Units: ug/L

Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method:

NWTPH-Dx

Analyte Name	•
Diesel Range Organics (DRO)	
Residual Range Organics (RR	(0)

Result Q MRL 66000 DY 2500 8600 F

**Factor** 10 1

Dilution

Analyzed Extracted 08/02/02 08/01/02 08/01/02 08/02/02

Date

Date

Lot KWG0205586 KWG0205586

Extraction

Note

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	195	50-150	08/02/02	Outside Control Limits Outside Control Limits
n-Triacontane	5	50-150	08/02/02	

500

Comments:

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Form 1A - Organic

SuperSet Reference:

1 of 1 RR18980

Analytical Results

Client:

Longview Fibre Company

Project:

Seattle Box/Lv. Fibre

Sample Matrix:

Water

Service Request: K2205123

Date Collected: NA

Date Received: NA

Diesel and Residual Range Organics

Sample Name:

Surrogate Name

o-Terphenyl

n-Triacontane

Method Blank

Lab Code:

KWG0205586-5

EPA 3510C

Units: ug/L

Basis: NA

**Extraction Method:** Analysis Method:

NWTPH-Dx

Level: Low

Analyte Name Diesel Range Organics (DRO)

Result Q ND U ND U

%Rec

76

76

MRL 250 500

Control

Limits

50-150

50-150

1 08/01/02 08/01/02 1

Date

Extracted Analyzed 08/02/02 08/02/02

Date

Lot KWG0205586 KWG0205586 Note

Extraction

Residual Range Organics (RRO)

Date

Analyzed

08/02/02

08/02/02

Dilution

Factor

Note

Acceptable Acceptable

Comments:

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Form 1A - Organic

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FICOC #1 04/02 -

# Cooler Receipt And Preservation Form

Project/C				_ Work Order K22_		5/2	3
Cooler re	ceived on 19130	and opened on	7/30/2	by	Kalk		
1.	Were custody seals of If yes, how many and	n outside of cook					YN
2.	Were seals intact and	signature & date	correct?	t	1.1-00	1	YN
3.	COC#			- Hand-	delilly	1	
	Temperature of coole	r(s) upon receipt	:	<del>\</del>		<i>)</i>	
1	Temperature Blank:				<del></del>	<del></del>	
4.	Were custody papers	properly filled or	ut (ink, signec		•		(y) N
5.	Type of packing mate	rial present		Nove	<del></del>		
6.	Did all bottles arrive	in good condition	ı (unbroken)?				Ŷ N
7.	Were all bottle labels	complete (i.e. ar	alysis, <del>preser</del>	vation, etc.)?			₹ N
8.	Did all bottle labels a	nd tags agree wit	h custody pap	ers?			<b>②</b> N ⋅
9.	Were the correct type	s of bottles used	for the tests in	ndicated?			Ø N
10.	Were all of the preser	ved bottles receiv	ved at the lab	with the appropriate p	H?		YN
11.	Were VOA vials chec	ked for absence	of air bubbles	, and if present, noted	below?		YN
12.	Did the bottles originate	ate from CAS/K	or a branch la	boratory?			Ø N
13.	Are CWA Microbiolo	ogy samples recei	ived with > 1	1/2 the 24 hr. hold time	remaining fro	om collection?	Y_N
14.	Was CL2/Residual ne	gative?					YN
RESOLU	TION:						
Samples t	hat required preservation	or received out o	f temperature	<u>:</u>			_
	Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials
							-
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**00009** CRFREV.DOC12/24/01





May 21, 2002

Service Request No: K2203104

Jim Mantell Longview Fibre Company 5901 E. Marginal Way Seattle, WA 98124

Re: Longview Fibre (Seattle)

Dear Jim:

Enclosed are the results of the sample(s) submitted to our laboratory on May 14, 2002. For your reference, these analyses have been assigned our service request number K2203104.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Valley

Ed Wallace

Project Chemist

EW/jeb

Page 1 of \_\_\_

cc: Hank Rakoz and Dave Mendenhall at Longview Fibre, Longview, WA

#### Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater

than or equal to the MDL.

#### Inorganic Data Qualifiers

- . The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

#### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

### Organic Data Qualifiers

- . The result is an outlier. See case narrative
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

#### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic lingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

#### Analytical Results

Client:

Longview Fibre Company Longview Fibre (Seattle)

Project: Sample Matrix:

Water

Service Request: K2203104

Date Collected: 05/07/2002

Date Received: 05/14/2002

# Diesel and Residual Range Organics

Sample Name:

West Parking Lot

Lab Code:

K2203104-001

Extraction Method:

EPA 3510C

Units: ug/L

Basis: NA

Level: Low

Analysis Method:

NWTPH-Dx

Analyte Name Diesel Range Organics (DRO) Residual Range Organics (RRO)

Result Q 35000 DY 4300 O

MRL 2500 500

**Factor** 10 1

Dilution

Extracted 05/15/02 05/15/02

Date

Analyzed 05/17/02 05/16/02

Date

Lot KWG0203344 KWG0203344

Extraction

Note

Control Date Surrogate Name %Rec Limits Note Analyzed 96 50-150 05/16/02 o-Terphenyl Acceptable 102 n-Triacontane 50-150 05/16/02 Acceptable

Comments:

Printed: 05/20/2002 12:56:16

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Merged

Form 1A - Organic

SuperSet Reference:

RR16918

Page 1 of 1

Analytical Results

Client: Project: Longview Fibre Company Longview Fibre (Seattle)

Sample Matrix:

Water

Service Request: K2203104

Date Collected: 05/07/2002

Date Received: 05/14/2002

Diesel and Residual Range Organics

Sample Name:

North Loading Dock

Lab Code:

K2203104-002

Extraction Method: EPA 3510C

Units: ug/L

Basis: NA

Level: Low

Analysis Method:

NWTPH-Dx

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed_	Extraction  Lot	Note
Diesel Range Organics (DRO)	4500 Y	250	1	05/15/02	05/16/02	KWG0203344	
Residual Range Organics (RRO)	2000 O	500	1	05/15/02	05/16/02	KWG0203344	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	84	50-150	05/16/02	Acceptable
n-Triacontane	93	50-150	05/16/02	Acceptable

Comments:

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Printed: 05/20/2002 12:56:21

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Merged

Form 1A - Organic

SuperSet Reference:

Page 1 of 1 RR16918

Analytical Results

Client:

Longview Fibre Company Longview Fibre (Seattle)

Project: Sample Matrix:

Water

Service Request: K2203104

Date Collected: NA Date Received: NA

Diesel and Residual Range Organics

Sample Name: Lab Code:

Method Blank

Units: ug/L Basis: NA

Extraction Method: EPA 3510C

KWG0203344-5

Analysis Method:

NWTPH-Dx

Level: Low

Analyte Name
Diesel Range Organics (DRO)
Residual Range Organics (RRO)

MRL
250
500

Factor	Extracted		Lot	Note
1	05/15/02	05/16/02	KWG0203344	
1	05/15/02	05/16/02	KWG0203344	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
o-Terphenyl	79	50-150	05/16/02	Acceptable	
n-Triacontane	94	50-150	05/16/02	Acceptable	

Comments:

U11006

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Merged

Form 1A - Organic

Page 1 of 1 SuperSet Reference: RR16918

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REPORT REQUIRES	MENTS						which.																			
I. Routine Report:						То	tal Meta	ıls: Al	As	Sb B	a Be	ВСа	a Col	Co (	Or Cu	Fe	Pb M	/lg Mi	и Мо	Ni	K Ag	) Na	Se S	r Ti	Sn V	Zn Hg
Blank, Surrogate required	e, as				— ]																			Sr Ti	Sn V	Zn Hg
II. Report Dup., MS	S, MSD as	TUDNAD	ROUND REC	UDEM	PAITS									DURE	: AK	CA	WI	NO	RHTW	EST	ОТН	ER:		_(CIF	ICLE O	NE)
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III. Data Validation	-	5 D			!																					
(includes all raw	,	Sta	ındard (10-15	working o	days)	(																				
IV. CLP Deliverable	Report	Pro	ovide FAX Re	sults																						
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RELINQUISHED BY:

Date/Time

Firm

Signature

Printed Name

Requested Report Date

Date/Time

Signature N. M Printed Name

RCOC #1 04/01

RECEIVED BY:

Date/Time

Signature

Printed Name

				tical Services Inc.  l Preservation Form		d Kin	d	
Project/Clie	Project/Client U: FNYR SHOPK PROJECT/Client							
Cooler rece	ived on 5-14-07a	nd opened on	5.19-	by_	TIME	1	/	
1.	Were custody seals on or If yes, how many and wl		ਸ? ————				Y N	
2.	Were seals intact and sig	nature & date	correct?				Y N)	
3.	COC#		7				$\mathcal{L}$	
	Temperature of cooler(s)	upon receipt:		\ <u>.</u>		<del></del>		
	Temperature Blank:			<u>\</u>		/	00	
4.	Were custody papers pro	perly filled or	nt (ink, signex	l, etc.)?	no to	st on c	YN	
5.	Type of packing material	present		to 60 to	5	subble!	\$	
6.	Did all bottles arrive in g	ood condition	(unbroken)?	¥			(Y) N	
7.	Were all bottle labels con	nplete (i.e. an	alysis, preser	vation, etc.)?	•		Y N	
8.	Did all bottle labels and	tags agree with	h custody par	ers?			X N	
9.	Were the correct types of	bottles used	for the tests in	odicated?			W N	
10.	Were all of the preserved	bottles receiv	od at the lab	with the appropriate pH	?		YN	
11.	Were VOA vials checked	l for absence o	of air bubbles	, and if present, noted b	elow?		YN	
12.	Did the bottles originate	from CAS/K	or a branch la	aboratory?			Ø N	
13.	Are CWA Microbiology	samples recei	ved with >	1/2 the 24 hr. hold time r	emaining fro	m collection?	YN	
14.	Was CL2/Residual negat	ive?		÷		,	YN	
Explain any	Hiscrepancies: <u>NO</u>	tc5+5	00/	COC 100	3520	lin G	<u> </u>	
Per	bottle excle	1 tox	n to	ranaly5	<u> </u>		<del>_</del>	
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RESOLUT	ION:		·				<del></del>	
Samples tha	t required preservation or	received out o	f temperature	<u>:</u>				
	Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials	
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300 Fibre Way Longview, WA 98632 Phone: (360) 575-5570 Fax: (360) 575-6110

# **Longview Fibre Co**



To:	Jim Mantell	From:	Dave Mendenhall	
Fax:	206-767-2442	Date:	May 6, 2002	
Phone	e:	Pages	: 2	
Re:	Sample you sent	CC:		
□ Urg	ent × For Review	☐ Please Comment	☐ Please Reply	☐ Please Recycle
Beck	art you sent back in Fe	bout the delay on the re bruary. We have been ha s so couldn't do them un	aving problems with	h the instrument that

Dave

# Columbia Analytical Services -- Kelso

		17-MA	UMMARY REPORT (il01) Y-02 14:21	
Service Req. No. Client No. Client Name	K2203104*** 125855 Longviewsfibre Conveny	受けられる Project Name 製品な	Longview Fibre (Seattle)	Bottles: 2 - 500 pl Amber
Bill fo:	Longview fibre-Seattle Box Plant Attn: Accounts Payable 5901 E. Marginal Way S. Seattle, WA 98124	Report To:	Longview Fibre Company Jim Mantell 5901 E. Marginal Way S. Seattle, NA 98124	
P.O. No. Logged In By ISR Num	LV040784 L KMORRON	Site 1D Project Chemist	Ed Val tace state and a part state of the	
COC Received Samples Submitted	Y 14-MAY-02			Storage: HERK C2
CAS Samp No. Cli	ent Sample No. Matri	x Collected Di	ueDate DX-NWFPH	
KZ203104-001 Wes KZ203104-002 Non Comments:	t Parking Lot vATER the Loading Book	17:30 07-MAY-02 28	MAY-02 I MAY-08 (SCOTTANCE) SCOTT POPER JUST AND SECOND SC	engelegen bestehnte stellt staten in der stellt ste
125855	cc: Hank Rakoz.			
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	•			
Samples Found To 6	Be Hazardous: NONE ALL_ *SOME	Page	1 of 1	Reviewed By:

# ACKNOWLEDGMENT OF RECEIPT OF SAMPLES

TO:

Jim Mantell Longview Fibre Company 5901 E. Marginal Way S. Seattle, WA 98124

FROM:

Ed Wallace, Project Chemist Columbia Analytical Services, Inc.

This is to inform you that the samples received for testing have been assigned CAS Service Request number K2203104. Please verify information and notify me of any corrections.

A copy of our work order is attached. If you have any questions regarding the status of this work, please call me at (360) 577-7222.

Thank you for your business.

Number of pages - 2 - (including cover sheet).

Columbia Analytical Services, Inc. 1317 South 13th Avenue P.O. Box 479 Kelso, WA 98626 (360) 577-7222 (360) 636-1068 - FAX

<sup>\*</sup> During the next few months, you may notice format changes in some of the documents you receive from CAS. However, these documents should contain the same information you are accustomed to receiving.



January 9, 2002

Service Request No: K2109499

Sonny Bivins Longview Fibre Company 5901 E. Marginal Way Seattle, WA 98124

Re: Longview Fibre Seattle

Dear Sonny:

Enclosed are the results of the sample(s) submitted to our laboratory on December 21, 2001. For your reference, these analyses have been assigned our service request number K2109499.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Wallace

Ed Wallace

Project Chemist

EW/II

Page 1 of \_\_\_\_\_

cc: Hank Rakoz, Longview Fibre (Longview)

Dave Mendenhall, Longview Fibre (Longview)

#### Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

POL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater

than or equal to the MDL.

#### Inorganic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

#### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N. The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

#### Organic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- · B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GCMS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

#### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

#### Analytical Results

Client:

Longview Fibre Company Longview Fibre Seattle

Project: Sample Matrix:

Water

Service Request: K2109499

Date Collected: 12/17/2001

Date Received: 12/21/2001

# Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:

North Loading Dock

Result Q

Lab Code:

K2109499-001

Units: ug/L

Basis: NA

**Extraction Method:** 

EPA 3510C

Analysis Method:

Analyte Name

Level: Low

FIQ

Dilution Date Extraction Date Factor Extracted Analyzed Lot Note

Gasoline Range Organics (GRO) ND U 99 1 12/22/01 12/27/01 KWG0108657 KWG0108657 Diesel Range Organics (DRO) 99 2100 Y ] 12/22/01 12/27/01 Residual Range Organics (RRO) 3000 O 250 1 12/22/01 12/27/01 KWG0108657

MRL

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	60	35-150	12/27/01	Acceptable
o-Terphenyl	86	50-150	12/27/01	Acc <del>ep</del> table
n-Triacontane	94	50-150	12/27/01	Acceptable

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Form 1A - Organic

Hade) (1461) SuperSet Reference: RR13911

LFC001983

#### Analytical Results

Client: Project: Longview Fibre Company Longview Fibre Seattle

Sample Matrix:

Water

Service Request: K2109499

Date Collected: 12/17/2001

Date Received: 12/21/2001

# Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: Lab Code:

West Parking Lot

Extraction Method:

K2109499-002

Analysis Method:

EPA 3510C FIQ

Units: ug/L

Basis: NA

Level: Low

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	14000 H	99	1	12/22/01	12/27/01	KWG0108657	
Diesel Range Organics (DRO)	92000 DY	990	10	12/22/01	01/02/02	KWG0108657	
Residual Range Organics (RRO)	8900 🔾	250	1	12/22/01	12/27/01	KWG0108657	
		• .					

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	 
4-Bromofluorobenzene	119	35-150	12/27/01	Acceptable	
o-Terphenyl	105	50-150	12/27/01	Acceptable	
n-Triacontane	105	50-150	12/27/01	Acceptable	

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Form 1A - Organic

Page 1 of 1

# Analytical Results

Client: Project: Longview Fibre Company Longview Fibre Seattle

Sample Matrix:

Water

Service Request: K2109499

Date Collected: NA Date Received: NA

# Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: Lab Code:

Method Blank

KWG0108657-5

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Analysis Method:

FIQ

Level: Low

			Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Note
Gasoline Range Organics (GRO)	ND U	100	]	12/22/01	12/26/01	KWG0108657	
Diesel Range Organics (DRO)	ND U	100	1	12/22/01	12/26/01	KWG0108657	
Residual Range Organics (RRO)	ND U	250	1	12/22/01	12/26/01	KWG0108657	
10							· · ·

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	73 .	35-150	12/26/01	Acceptable
o-Terphenyl	77	50-150	12/26/01	Acceptable
n-Triacontane	94	50-150	12/26/01	Acceptable

Comments:

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Form 1A - Organic

SuperSei Reference: RR13911

Page 1 of 1

olumbia Analytical
Services **

# **CHAIN OF CUSTODY**

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required						*IND	ICATE	STA	TE HY	DROC	CARBO	ON PF	ROCE	OURE	: AK	CA	WI	NO	RHTW	EST	отн	ER:_		(CIF	ICLE ONE)
II. Report Dup., MS required	s, MSD as	l .	OUND REC	UIREMI	ENTS		CIAL II																		
III. Data Validation !	Report	24 1		_48 hr.																					
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# Columbia Analytical Services Inc. Cooler Receipt And Preservation Form

Project/Clie	nt / 113126			Work Order K21	(	7499							
•	- <u> </u>	nd opened on	1.7/21/	C) by Ap		<del></del>							
1.	Were custody seals on or If yes, how many and wh	uside of coole	•	<u> </u>		MD	Ø N						
2.	Were seals intact and sig	nature & date	correct?				(Y) N						
3.	COC#												
	Temperature of cooler(s)	upon receipt:		17.8									
	Temperature Blank:		ı	n.8									
4.	Were custody papers pro	perly filled ou	t (ink, signed	i, etc.)?			у 🕥						
5.	Type of packing material	present	Birri	m Furry	1								
6. Did all bottles arrive in good condition (unbroken)?													
7.	Were all bottle labels con	mplete (i.e. an	alysis, preser	vation, etc.)?			Ø N						
8.	Did all bottle labels and	ags agree with	custody par	pers?			Y N						
9.	Were the correct types of	bottles used f	for the tests is	ndicated?	•		(Y) N						
10.													
11.													
12.	<i>C</i> 0												
13.	Are CWA Microbiology	samples recei	ved with >	1/2 the 24 hr. hold time t	emaining fro	m collection?	YN						
Explain any	discrepancies: NO M	141451	s 6157	m UN CCC	- Bo	DUES.	the-						
	FD FOR DY												
RESOLUT	TON:												
Samples that	nt required preservation or	received out o	f temperature	<u>:</u>									
	Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials						
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CRFREV.DOC12/20/01



October 22, 2001

Service Request No: K2107247

Sonny Bivins Longview Fibre Company 5901 E. Marginal Way Seattle, WA 98124

Re: Longview Fibre Seattle

Dear Sonny:

Enclosed are the results of the sample(s) submitted to our laboratory on October 2, 2001. For your reference, these analyses have been assigned our service request number K2107247.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Ed Wallace

Ed Wallace

Project Chemist

EW/afs

Page 1 of \_\_\_

cc: Hank Rakoz, Longview Fibre Dave Mendenhall, Longview Fibre

# Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater

than or equal to the MDL.

#### Inorganic Data Qualifiers

- The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

#### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The reported value is estimated because of the presence of matrix interference.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

# Organic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

#### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product cluting in approximately the correct carbon range, but the clution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

# Analytical Results

Client:

Longview Fibre Company Longview Fibre Seattle

Project: Sample Matrix:

Water

Service Request: K2107247

Date Collected: 09/28/2001 Date Received: 10/02/2001

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: Lab Code:

West Parking Lot

Units: ug/L Basis: NA

Extraction Method:

K2107247-001

EPA 3510C

Level: Low

Analysis Method:

FIQ

	_			Dilution	Date	Date	Extraction	
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot	Note
Gasoline Range Organics (GRO)	56000	DH	10000	100	10/05/01	10/12/01	KWG0106552	
Diesel Range Organics (DRO)	280000	DF	10000	100	10/05/01	10/12/01	KWG0106552	
Residual Range Organics (RRO)	26000	DO	25000	100	10/05/01	10/12/01	KWG0106552	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	199	35-150	10/12/01	Outside Control Limits
o-Terphenyl	0	50-150	10/12/01	Outside Control Limits
n-Triacontane	59	50-150	10/12/01	Acceptable

Comments:

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Printed: 10/17/2001 10:42:08

Merged

Form 1A - Organic

Page 1 of 1

# Analytical Results

Client:

Longview Fibre Company Longview Fibre Seattle

Project: Sample Matrix:

Water

Service Request: K2107247

Date Collected: 09/28/2001

Date Received: 10/02/2001

# Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name: Lab Code:

North Shipping Deck

K2107247-002

EPA 3510C

Units: ug/L Basis: NA

Extraction Method:

Level: Low

Analysis Method: FIQ

Analyte Name	Result Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	200 H	100	1	10/05/01	10/06/01	KWG0106552	
Diesel Range Organics (DRO)	3100 Y	100	1	10/05/01	10/06/01	KWG0106552	
Residual Range Organics (RRO)	2000 F	250	1	10/05/01	10/06/01	KWG0106552	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
4-Bromofluorobenzene	61	35-150	10/06/01	Acceptable	
o-Terphenyl	78	50-150	10/06/01	Acceptable	
n-Triacontane	73	50-150	10/06/01	Acceptable	

Comments:

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Form 1A - Organic

Page 1 of 1

# Analytical Results

Client:

Longview Fibre Company Longview Fibre Seattle

Project: Sample Matrix:

Water

Service Request: K2107247 Date Collected: NA

Date Received: NA

# Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:

Method Blank

Lab Code:

KWG0106552-6

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method: FIQ

			Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Note
Gasoline Range Organics (GRO)	ND U	100	1	10/05/01	10/06/01	KWG0106552	
Diesel Range Organics (DRO)	ND U	100	1	10/05/01	10/06/01	KWG0106552	
Residual Range Organics (RRO)	ND U	250	1	10/05/01	10/06/01	KWG0106552	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
4-Bromofluorobenzene	62	35-150	10/06/01	Acceptable	
o-Terphenyl	83	50-150	10/06/01	Acceptable	
n-Triacontane	75	50-150	10/06/01	Acceptable	·

Comments:

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Form 1A - Organic

Page 1 of 1

<b>Columbia</b>
Analytical <sup>*</sup>
Services Inc

# **CHAIN OF CUSTODY**

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Services Inc. All Employeds Owned Company 1.	317 South 13t	th Ave. • Ke	ilso, WA 9	8626	(360)	577-72	22 • (	(800) 6	95-722	22 • F	AX (36	- 60) 636	5-1068		F	PAGE	≣		_OF			CO	C #_	
PROJECT NAME LONGUE			·		/	7		1	T	7	$T_{\perp}$	7	10	7	$\mathcal{T}^{-}$	7	7	7	7	7	1,	7	7	777
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SAMPLE I.D. DATE	TIME	LAB I.D.	MATRIX	NUMBES	Semivoletik		150		Oil School School			Chloophes A Chief	7 4	18	Medis, Theol	3/3	ĮĘ, Š	103 800 51 804 10 10 10 10 10 10 10 10 10 10 10 10 10	12 (Single) 20 XO1		/	/	/	REMARKS
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REPORT REQUIREMENTS	В	ICE INFOR		1	Circle	which n	netais	are to	be ana	lyzed:			L	<b></b>	· · ·									······································
I. Routine Report: Method					Tot	al Metal	s: Al	As :	Sb Ba	а Ве	B Ca	Cd	Co (	Or Cu	Fe	Pb N	/lg M	n Mo	Ni	K Ag	Na	Se S	r TI	Sn V Zn Hg
Blank, Surrogate, as required					Dissoh	ved Meta	ls: Al	As	Sb Ba	Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg										Sn V Zn Hg				
II. Report Dup., MS, MSD as	<u> </u>				'INDI	CATE	STAT	E HY	DROC	ARBO	ON PF	ROCE	DURE	: AK	CA	WI	NO	RHTW	EST	отн	ER:		_(CIR	CLE ONE)
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III. Data Validation Report	24 h		48 hr.																					
(includes all raw data)	1	ay ndard (10-15	working o	davs)																				
IV. CLP Deliverable Report	]	vide FAX Re	•	-,-,																				
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# Columbia Analytical Services Inc. Cooler Receipt And Preservation Form

				tical Services Inc. Preservation Form	١	Hav	id De	<u> </u>
	lien $L\sqrt{5}$ $V$	e - Sect	tle.	Work Order K21_	QZ.	247	· '	
1.	Were custody seals of	n outside of coole	,				YES NO	······································
2.	Were seals intact and	l signature & date	correct?				YES NO	
3.	COC#							
	Temperature of cool	er(s) upon receipt:		23.0				
	Temperature Blank:					- <del></del>		
4.	Were custody papers	properly filled ou	ıt (ink, signed	1, eic.)? , hot	815h	LY 1 (	YES NO	)
5.	Type of packing mat	erial present	····	lawfolds:		<del></del>		
6.	Did all bottles arrive	in good condition	(unbroken)?	PWV			YES NO	
7.	Were all bottle labels	s complete (i.e. an	alysis, preser	vation, etc.)?			YES NO	
8.	Did all bottle labels	and tags agree with	n custody pap	ers?		,	YES NO	
9.	Were the correct type	es of bottles used f	or the tests in	ndicated?			TES NO	
10.	Were all of the prese	rved bottles receiv	ed at the lab	with the appropriate pF	I and/or Cl2/	Res negative?	YES NO	
11.	Were VOA vials che	ecked for absence of	of air bubbles	, and if present, noted h	below?		_YES NO	<b>⇒</b>
12.	Did the bottles origin	nate from CAS/K	or a branch la	aboratory?		,	YES NO	
Explain			any			^	discrepancies	
	4.4		- 6					
Samples	that required preservation Sample ID	Reagent	Volume	Lot Number	Bottle	Rec'd out of	Initials	
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CRFREV.DOC9/28/01

Columbia Analytical Services -- Kelso INTERNAL LOGIN SUMMARY REPORT (il01)

24-FEB-00 08:37 Service Req. No. | X2003203 Bottles: 2 - 1 L Amber Project Ha. 125855 Quarterly Groundwater Client No. Project Name Client Name Longview Fibre Company Longview Fibre-Seattle Box Plant Report 1o: Longview Fibre Company Bill Tc: Attn: Accounts Payable 5901 E. Marginal Way S. Jim Mantell 5901 E. Marginal Way S. Seattle, WA 93124 Seattle, WA 96124 P.O. No. Logged in By LV039801 L Site 10 FADATR Project Chemist Ed Wallace ISR Num COC Received Storage: HERM E3 Samples Sybmitted 22-FEB-00 CAS Samp No. Client Sample No. Nothix Collected DueDate DX-HWTPH #20 #20 17-FEB-00 07-MAR-00 17-FEB-00 07-MAR-00 K2001203-001 #1 Harth Londing Deck K2001003-002 #2, West Parking Lot: Connect s: K2001203 DIC-NUMBER: \* WATCH HOLD TIME. 125855 cc: Dave Mendenhall

Samples Found To Be Hazardous: NOME\_\_ALL\_PSOME\_\_\_\_\_\_\_Page 1 of 1



June 15, 2001

Service Request No: K2103785

Jim Mantell Longview Fibre Company 5901 E. Marginal Way Seattle, WA 98124

Re: Longview Fibre (Seattle Box)

Dear Jim:

Enclosed are the results of the sample(s) submitted to our laboratory on May 31, 2001. For your reference, these analyses have been assigned our service request number K2103785.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Ed Wallace

Ed Wallace

Project Chemist

EW/

Page 1 of

cc: Hank Rakoz, Longview Fibre Company
Dave Mendenhall, Longview Fibre Company

### Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater

than or equal to the MDL.

#### **Inorganic Data Qualifiers**

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

#### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The reported value is estimated because of the presence of matrix interference.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

#### Organic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

#### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard
- The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

### Analytical Report

Client: Project: Longview Fibre Company Longview Fibre (Seattle Box)

Service Request: K2103785 Date Collected: 5/29/01

Sample Matrix:

Water

Date Received: 5/31/01

Semivolatile Petroleum Products Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:

North Shipping dock

Units: ug/L (ppb)

Lab Code:

K2103785-001

Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Gasoline	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Naphtha Distillate	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	•
Jet Fuel as JP-4	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Mineral Spirits	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Jet Fuel as Jet A	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Kerosene	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Diesel	EPA 3510C	8015B	100	1	6/1/01	6/5/01	1900	Н
Heavy Fuel Oil	EPA 3510C	<b>80</b> 15B	250	1	6/1/01	6/5/01	ND	
Lube Oil	EPA 3510C	8015B	250	1 -	6/1/01	6/5/01	930	0

Semi-quantitative. Results are expected to exhibit a low bias due to a potential loss of the volatile components during the extraction procedure.

Approved By:	Nest	Date: (4) 5/01
S22/020597p		

HU()04

03785PHC LL1 - 1 6/11/01

### Analytical Report

Client: Project: Longview Fibre Company
Longview Fibre (Seattle Box)

Service Request: K2103785

Date Collected: 5/29/01

Sample Matrix:

Water

Date Collected: 5/29/01

Date Received: 5/31/01

Semivolatile Petroleum Products
Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:

West Parking Lot

Units: ug/L (ppb)

Lab Code:

ib Code:

K2103785-002

Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Gasoline	EPA 3510C	8015B	100	1	6/1/01	6/5/01	6700	*H
Naphtha Distillate	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Jet Fuel as JP-4	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Mineral Spirits	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Jet Fuel as Jet A	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Kerosene	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Diesel	EPA 3510C	8015B	100	1	6/1/01	6/7/01	39000	F
Heavy Fuel Oil	EPA 3510C	8015B	250	1	6/1/01	6/5/01	ND	
Lube Oil	EPA 3510C	8015B	250	1	6/1/01	6/5/01	4200	F

Semi-quantitative. Results are expected to exhibit a low bias due to a potential loss of the volatile components during the extraction procedure.

Approved By:	m/	Date: <u>(1)5 δ</u> ,	
S22/020397p			

90005

03785PHC.LL.) - 2 6/13/01

Page No .

### Analytical Report

Client: Project: Longview Fibre Company
Longview Fibre (Seattle Box)

Service Request: K2103785 Date Collected: NA

Sample Matrix:

Water

Date Received: NA

Semivolatile Petroleum Products
Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:

Method Blank

Units: ug/L (ppb)

Lab Code:

K010501-WB

Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Gasoline	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Naphtha Distillate	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	*
Jet Fuel as JP-4	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	. •
Mineral Spirits	EPA 3510C	8015B	100	ī	6/1/01	6/5/01	ND	
Jet Fuel as Jet A	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Kerosene	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Diesel	EPA 3510C	8015B	100	1	6/1/01	6/5/01	ND	
Heavy Fuel Oil	EPA 3510C	8015B	250	ì	6/1/01	6/5/01	ND	
Lube Oil	EPA 3510C	8015B	250	1	6/1/01	6/5/01	ND	

Semi-quantitative. Results are expected to exhibit a low bias due to a potential loss of the volatile components during the extraction procedure.

Approved By:	-jaf	_ Date: _	6/15/81	
1522/020597p		•		60000

03785PHC LL1 - MB 6/11/01

Page No .

### QA/QC Report

Client:

Longview Fibre Company

Service Request: K2103785

Project:

Longview Fibre (Seattle Box)

Date Collected: 5/29/01

Sample Matrix:

Water

Date Received: 5/31/01

Date Extracted: 6/1/01

Date Analyzed: 6/5/01

Surrogate Recovery Summary

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Prep Method:

EPA 3510C

Units: PERCENT

Analysis Method: 8015B

Basis: NA

Sample Name	Lab Code	Test Notes	Perc	ent Recov 4-Bromofluorobenzene	r e r y n-Triacontane
North Shipping dock	K2103785-001		82	55	86
West Parking Lot	K2103785-002		70	71	84
Method Blank	K010601-WB		90	58	86

CAS Acceptance Limits:

50-150

20-150

50-150

Approved By:	THE	_ Date: _	6/15/01	60007
1 ID 3 M 304076				

3UR3/020397p 03785PHC LLI SUR 6/11/01

Page No

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Analytical
Services Inc.

Columbia Analytical Services Inc.		17 South 131	h Ave • Ke	eo WA 9		<b>IA</b>	_	-	-					~1068		F	AGE			_OF		#:	_co	( ) c #_	10	<u> </u>
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### Columbia Analytical Services Inc. Cooler Receipt And Preservation Form

Handpel

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ler received on 13	21/11	nd opened or	5/31	GI by_	1-/ 7	W :		•
Were custod				~	<del></del>			YE
If yes, how r								11
Were seals in	tact and sign	nature & date	e correct?					YE
COC#				<del></del> -				
Temperature	of cooler(s)	upon receipt	t:	11.9				
Temperature	Blank:							_
Were custody	/ babers brol	perly filled o	ဖြင့် (ink, signe	d, etc.)?	•			/YES
Type of pack	ing material	present	Diaboli	1S				
. Did all bottle	s arrive in g	ood conditio	n (unbroken)	?				ÝES
Were all bott	le labels com	oplete (i.e. ai	nalysis, prese	rvation, etc.)?		••		YE
Did all bottle	labels and t	ags agree wit	th custody pag	pers?				(Es
· Were the con	ea types of	bottles used j	for the tests i	ndicased?				YES
Were all of th	e preserved	bottles recei	ved at the lab	with the appro	priate pH	<b>!?</b>		YES
Were VOA v	ials cbecked	for absence	of air bubbles	s, and if presen	it, noted b	elow?		YES
Did the bottle	s originate f	rom CAS/K	or a branch la	aboratory?				YES
ain any discrepancies_	ervation or r	excived out	of temperatur	e:				
ain any discrepancies_  ples that required pres  Sample ID	ervation or r	eceived out	of temperatur Volume	e: Lot Nurr	nber	Bottle	Rec'd out of Temperature	Initial
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CRFREV.DOC1/2/01



June 3, 2003

Service Request No: K2303331

Jim Mantell Longview Fibre Company 5901 E. Marginal Way S. Seattle, WA 98124

RE: Seattle Ground Water

Dear Jim:

Enclosed are the results of the sample(s) submitted to our laboratory on May 5, 2003. For your reference, these analyses have been assigned our service request number K2303331.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3291.

Respectfully submitted,

Columbia Analytical Services, Inc.

Ed Wallace

Project Chemist

EW/jeb

Page 1 of

cc:

Hank Rakoz, Longview Fibre

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#### Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a

substance allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable

NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater

than or equal to the MDL.

#### Inorganic Data Qualifiers

- \* The result is an outlier. See case narrative
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRI/MDL.
- i The MRL/MDI, has been elevated due to a matrix interference.
- X See case narrative

#### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B. The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative,
- + The correlation coefficient for the MSA is less than 0.995.

#### **Organic Data Qualifiers**

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B. The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a continuation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

#### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- The chromatographic tingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product cluting in approximately the correct carbon range, but the clution pattern does not mutch the calibration standard.
- Z. The chromatographic tingerprint does not resemble a petroleum product.

Analytical Results

Client: Project: Longview Fibre Company Seattle Ground Water

Sample Matrix:

Water

Service Request: K2303331

Date Collected: 05/01/2003

Date Received: 05/05/2003

Diesel and Residual Range Organics

Sample Name:

West Parking Lot

Lab Code:

K2303331-001

Units: ug/L Basis: NA

Extraction Method:

EPA 3510C

Level: Low

Analysis Method:

NWTPH-Dx

Analyte Name
Diesel Range Organics (DRO)

Residual Range Organics (RRO)

Result Q MRL 140000 DY 25000 13000 DO 5000

**Factor** Extracted Analyzed 100 05/07/03 05/28/03 10 05/07/03 05/12/03

Date

Date

Dilution

Lot KWG0306416 KWG0306416

Extraction

Note

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
o-Terphenyl n-Triacontane	132 109	50-150 50-150	05/12/03 05/12/03	Acceptable Acceptable	

Comments:

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Form 1A - Organic

SuperSet Reference: RR27050

#### Analytical Results

Client: Project: Longview Fibre Company Seattle Ground Water

Sample Matrix:

Water

Service Request: K2303331

Date Collected: 05/01/2003 Date Received: 05/05/2003

### Diesel and Residual Range Organics

Sample Name:

North Loading Dock

Units: ug/L

Lab Code:

K2303331-002

Basis: NA

Extraction Method: EPA 3510C

Level: Low

Analysis Method:

NWTPH-Dx

•			Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Note
Diesel Range Organics (DRO)	8600 'Y	260	1	05/07/03	05/12/03	KWG0306416	
Residual Range Organics (RRO)	3300 O	520	1	05/07/03	05/12/03	KWG0306416	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
o-Terphenyl	87	50-150	05/12/03	Acceptable	
n-Tuucontane	97	50-150	05/12/03	Acceptable	

Comments:

Printed: 05/30/2003 09:44:32

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Form 1A - Organic

Page

SuperSet Reference:

RR27050

Analytical Results

Client:

Longview Fibre Company Seattle Ground Water

Project: Sample Matrix:

Water

Service Request: K2303331

Date Collected: NA Date Received: NA

Diesel and Residual Range Organics

Sample Name:

Method Blank

Lab Code:

KWG0306416-6

Extraction Method: Analysis Method:

EPA 3510C

NWTPH-Dx

Units: ug/L

Basis: NA

Level: Low

			Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Note
Diesel Range Organics (DRO)	ND U	250	· 1	05/07/03	05/07/03	KWG0306416	
Residual Range Organics (RRO)	ND U	500	1	05/07/03	05/07/03	KWG0306416	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
o-Terphenyl	105	50-150	05/07/03	Acceptable	
n-Trancontane	102	50-150	05/07/03	Acceptable	

Comments:

00006

Primed: 05/30/2003 09:45:03

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Form 1A - Organic

SuperSet Reference: RR27050

Page 1 of 1

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	Services ™

## **CHAIN OF CUSTODY**

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

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### Columbia Analytical Services, Inc. General Terms and Conditions

Laboratory Services • 1-800-695-7222

- 1. These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory ("LAB") and Client They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to LAB. The invalidity or unenforceability, in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state from which services are procured.
- 2. Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components. LAB warrants only that it will perform testing services, obtain findings and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
- At LAB sole discretion, preliminary results may be given in advance of the laboratory report. Such preliminary results are tentative, subject to confirmation and final review by LAB. Client's use of preliminary results in any manner shall be at Client's sole risk.
- 3. Scope and Compensation. LAB agrees to perform the services described in the proposal or agreement to which these Terms and Conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described.

Payment terms are not 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1.1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of teasonable automey fees if such expense is incurred. The prices, unless stated, do not include any sales, use or other taxes. Such taxes will be added to invoice prices when required. LAB reserves the right to require payment prior to release of data. Until such time as Client invoices are paid in full, LAB has no obligation, and will not defend, reproduce, return, or supplement data results.

- 4. Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule, or on verbal quotations agreed to in writing by the parties. Unless specifically indicated on the written confirmation of quotation, analytical turnaround times are not guaranteed. The minimum charge will be \$100,00 unless otherwise noted.
- 5. Methods. Where applicable, LAB will use analytical methodologies which are in substantial conformity with U.S. Environmental Protection Agency (EPA), State Agency, American Society for Testing and Materials (ASTM), Association of Official Analytical Chemists (AOAC). Standard Methods for the Examination of Water and Wastewater, or other recognized methodologies. LAB reserves the right to deviate from these methodologies, if necessary or appropriate, due to the nature or composition of the sample or otherwise, based on the reasonable judgment of LAB. Deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or LAB's standard operating procedures.
- 6. Limitations of Liability. In the event of any error, omission or other professional negligence, the sole and exclusive responsibility of LAB shall be to reperform the deficient work at its own expense, and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation or responsibility of any kind for losses, costs, expenses or other damages (including but not limited to any special, indirect, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients, and LAB is in no way responsible for the use of such results by clients or third parties. All results should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of the results.

- 7. Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance which is to be delivered to LAB will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.
- 8. Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss of or damage to such sample remains

with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from LAB's premises.

LAB will use us best efforts to arrange for the shipment of specially prepared sample bottles, sampling instructions per Client instruction by the readily available, least cost method. Any other shipment arrangements will be at Client's expense.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis, unless modified by applicable state or federal laws. Client will be required to give to LAB written instructions concerning disposal of these samples.

- 1.M3 reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample which, in the sole judgment of LAB, (a) is of unsuitable volume, (b) may be or become unsuitable for, or may pose a risk in handling, transport or processing for any health, safety, environmental or other reason, whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) has been delivered to the LAB more than 72 hours after sampling or if one half or more of the recommended holding time for the analysis has lapsed.
- Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort, including negligence.
- 10. Data Deliverables. Where specifically requested by Client, LAB agrees to produce electronic data representing services performed hereunder, subject to the following specific understanding between the parties: LAB agrees to supply Client with electronic data as mutually defined, using an agreed medium. Client recognizes that LAB is not a software consultant, manufacturer or reseller; any transfer of electronic data pursuant to services provided by LAB is an accommodation to and strictly for the convenience of the client who is solely liable for the choice and maintenance of the medium utilized. Electronic data provided under this agreement is not deemed to be the project deliverable for the purpose of fulfilling obligations under the Agreement. The provision of electronic data does not in any way modify the intention of the parties that the Client rely on the written or hard copy form of the deliverable.

Except with regard to any limited warranty as specifically set forth below, LAB disclaims and excludes all warranties express or implied with regard to the creation. transmittal or use of electronic data hereunder. The limited warranty in this Agreement replaces all other warranties, express or implied, including any warranties of merchantability of fitness for a particular purpose. Professional warranties extend to written or hard copy deliverables only and do not extend to electronic data supplied to Client. Professional warranties in the Agreement which extend to written or hard copy deliverables shall be undisturbed by this Amendment, LAB's liability for medium failure shall be limited to replacement of the electronic data with a hard copy for a period of thirty days from the date of detivery. LAB's electronic data transfer is derived in part from or is created using third party software, and no such third party warrants or assumes any liability regarding use of or undertakes to provide support information relating to LAB's electronic data. LAB will utilize anti-virus programs on a best efforts basis in preparation of the electronic data transfer, but LAB makes no warranty as to the effectiveness of such screening. LAB will also use its best efforts to ensure that its electronic data will meet all criteria as specified by Client, including criteria regarding date/time data, if, and when, included; but LAB makes no warranty as to the appropriateness of the client specified criteria by accepting the same.

In addition to indemnities contained in the underlying agreement between LAB and Client, Client shall hold LAB harmless from any claims, suits or liability arising from or related to electronic data supplied pursuant to this Agreement. Any reuse of original or altered files by Client shall be at Client's risk and without liability or responsibility to LAB, but shall entitle LAB to additional compensation for such unauthorized reuse. In no event will LAB's liability for electronic data include any special, incidental or consequential damages, whether or not LAB has knowledge of the potential for loss or damage.

11. Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB which results in whole or in part from any cause or circumstances shall include but not be limited to acts of Cod, acts of Client, acts orders of any government authority, stakes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

# Columbia Analytical Services Inc. Cooler Receipt And Preservation Form

Project/Clie	m Ly. Fibr	<i>'\'</i>	Work Order K23	333	3/	<del></del>
Cooler rece	eived on $5(5)0$	3 and opened	on 5 5 03	by	Khi	
1.	Were custody seals on or If yes, how many and wh				Y /	
2.	Were seals intact and sig	nature & date correct?		<i>∞</i> ?	·	B)
3.	Is the shipper's airbill av	ailable and filed? If p	o, record airbill number	: UB.	(Y)	N
4.	COC#					
	Temperature of cooler(s)	) upon receipt:	13.9			
	Temperature Blank:			•		
5.	Were custody papers pro	perly filled out (ink, s	igned, etc.)?		$(\mathbf{Y})$	N.
6.	Type of packing material	present	Steeva	\$	_	
7.	Did all bottles arrive in g	good condition (unbrok	ten)?	• •	(Y)	N
8.	Were all bottle labels cor	mplete (i.e. analysis, p	preservation, etc.)?		Ŷ,	N
9.	Did all bottle labels and	tags agree with custody	y papers?			N
10.	Were the correct types o	f bottles used for the to	ests indicated?		TY	N
11.	Were all of the preserve	d bottles received at th	e lab with the appropria	te pH?	¥	N
12.	Were VOA vials checked	d for absence of air bu	bbles, and if present, no	nted below?	· <del>Y</del>	N
13.	Did the bottles originate	from CAS/K or a bran	nch laboratory?		LY)	N
14.	Are CWA Microbiology	samples received with	$1 > \frac{1}{2}$ the 24 hr. hold tir	ne remaining from o	collection? Y	N
15.	Was Cl2/Res negative?	. A ma vit		•	_ y	N
Explain any	discrepancies: (18	sed Bothe	order for	COC, 111-	lests are	-
M165	ing on Coc					_
			·			_
				<del></del>		_
'RESOLUT	ION:					~
Samples that	required preservation or rec	eived out of temperature:	Dannes	recidoo	of of tal	NO
	Sample ID	Reagent Volume	Lot Number		ec'd out of Initials	1
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			TRACKING NUMBER			_
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